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FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER MIGGINS, MICHAEL C	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/617,731  
Filing Date: July 14, 2003  
Appellant(s): YAMADA ET AL.

**MAILED**  
**DEC 21 2007**  
**GROUP 1700**

\_\_\_\_\_  
Paul D. Strain  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/15/07 appealing from the Office action  
mailed 5/11/07.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,591,871	Smith et al.	07-2003
6,576,312	Ito et al.	06-2003

<b>6,619,330</b>	<b>Ito et al.</b>	<b>09-2003</b>
<b>6,589,647</b>	<b>Ozawa et al.</b>	<b>07-2003</b>

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (US 6591871) in view of Ito et al. (US 6576312).

Smith discloses a resinous fuel transport tube (abstract) comprising at least one first cylindrical resin layer comprising at least one resin selected from the group consisting of polybutylene terephthalate, polybutylene naphthalate, polyethylene terephthalate and polyethylene naphthalate (14 from Fig. 2 and column 3, lines 41-67), and at least one second cylindrical resin layer formed generally coaxially with the at least one first cylindrical layer comprising polybutylene terephthalate or polybutylene naphthalate wherein the second layer is in direct contact with the first layer (12 from Fig. 2 and column 3, lines 41-67) and further comprising an innermost cylindrical layer which is electrically conductive comprising polybutylene terephthalate or polybutylene naphthalate and wherein the innermost electrically conductive layer is independent from

the at least one first cylindrical resin layer and the at least one second cylindrical layer (19 from Fig. 3 and column 3, lines 41-67) (applies to instant claims 1, 14-18 and 13).

Smith fails to disclose wherein the second layer (the middle layer) comprises block copolymer which comprises at least one segment selected from the group consisting of polybutylene terephthalate and polybutylene naphthalate as a hard segment, and at least one segment selected from the group consisting of polytetramethylene glycol and polycaprolactone as a soft segment, wherein the conductive cylindrical resin layer forming the innermost layer has a volume resistivity value of not higher than  $10^6$  ohmxcn, wherein the conductive cylindrical resin layer forming the innermost layer has a thickness within a range of from 3 to 30% of a total wall thickness of all the layers of the resinous tube, wherein the at least one first resin layer has a total thickness with a range of from 3 to 70% of a total thickness of all the layers of the resinous tube, wherein the conductive cylindrical resin layer forms part of the at least one first cylindrical resin layer and the at least one second cylindrical resin layer.

Ito '312 discloses wherein the second layer (the middle layer) comprises block copolymer which comprises at least one segment selected from the group consisting of polybutylene terephthalate and polybutylene naphthalate as a hard segment, and at least one segment selected from the group consisting of polytetramethylene glycol and polycaprolactone as a soft segment (column 5, line 62 through column 6, line 32 and column 6, lines 57 through column 7, line 5), wherein the conductive cylindrical resin layer forming the innermost layer has a volume resistivity value of not higher than  $10^6$

ohm x cm (column 6, lines 33-56), wherein the conductive cylindrical resin layer forming the innermost layer has a thickness within a range of from 3 to 30% of a total wall thickness of all the layers of the resinous tube, wherein the at least one first resin layer has a total thickness with a range of from 3 to 70% of a total thickness of all the layers of the resinous tube (Tables 1-2 and column 6, lines 57 through column 7, line 5), wherein the conductive cylindrical resin layer forms part of the at least one first cylindrical resin layer and the at least one second cylindrical resin layer (column 6, lines 57 through column 7, line 5) (applies to instant claims 1-4, 12, 14 and 18) in a fuel tube (abstract) for the purpose of providing excellent resistances such as gasoline, detergent and hydrolysis (column 2, lines 61-67).

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided wherein the second layer (the middle layer) comprises block copolymer which comprises at least one segment selected from the group consisting of polybutylene terephthalate and polybutylene naphthalate as a hard segment, and at least one segment selected from the group consisting of polytetramethylene glycol and polycaprolactone as a soft segment, wherein the conductive cylindrical resin layer forming the innermost layer has a volume resistivity value of not higher than  $10^6$  ohmxcn, wherein the conductive cylindrical resin layer forming the innermost layer has a thickness within a range of from 3 to 30% of a total wall thickness of all the layers of the resinous tube, wherein the at least one first resin layer has a total thickness with a range of from 3 to 70% of a total thickness of all the layers of the resinous tube, wherein the conductive cylindrical resin layer forms part of

the at least one first cylindrical resin layer and the at least one second cylindrical resin layer in the tube of Smith in order to provide excellent resistances such as gasoline, detergent and hydrolysis as taught or suggested by Ito '312.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (US 6591871) in view of Ito et al. (US 6576312), as applied to claims 1-4 and 12-18 above, and further in view of Ito et al. (US 6619330).

Smith fails to disclose wherein the second or innermost layer comprises at least one of a hydrogenated dimer acid or an ester-formable derivative of hydrogenated dimer acid.

Ito '330 discloses a polybutylene terephthalate comprising hydrogenated dimer acids (column 2, lines 21-67) in a fuel hose (abstract) for the purpose of providing improved resistance to corrosion (column 2, lines 1-8) and thus it would have been obvious to have provided the dimer acid in either the second or innermost layer of Smith, especially since Smith discloses that the second or innermost layer comprises polybutylene terephthalate as discussed above, in order to provide improved resistance to corrosion.

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided wherein the second or innermost layer comprises at least one of a hydrogenated dimer acid or an ester-formable derivative of hydrogenated dimer acid in the hose of Smith in order to provide improved resistance to corrosion as taught or suggested by Ito '330.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (US 6591871) in view of Ito et al. (US 6576312), as applied to claims 1-4 and 12-18 above, and further in view of Ozawa et al. (US 6589647).

Smith fails disclose wherein the conductive resin layer further comprises ethylene-propylene rubber particles having a particle size of not larger than 1 micron.

Ozawa discloses a conductive resin layer further comprises ethylene-propylene rubber particles having a particle size of not larger than 1 micron (abstract, column 3, lines 16-22, column 5, lines 17-52, column 10, lines 24-32 and Table 3) in hose (column 10, lines 24-32) for the purpose of providing the ability to freely control the volume resistivity.

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided wherein the conductive resin layer further comprises ethylene-propylene rubber particles having a particle size of not larger than 1 micron in the hose of Smith in order to freely control the volume resistivity as taught or suggested by Ozawa.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated

by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4, 7-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10980313 in view of Smith (US 6591871).

Claims 1-18 of copending Application No. 10980313 substantially recite applicant's instant claims. However, claims 1-18 of copending Application No. 10980313 fail to recite an innermost conducting layer.

Smith recites an innermost conducting layer as discussed above for the purpose of dissipating static charge and therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided an innermost conducting layer in the invention recited in claims 1-18 of copending Application No. 10980313 in order to dissipate static charge as taught or suggested by Smith.

This is a provisional obviousness-type double patenting rejection.

## **(10) Response to Argument**

With regard to independent claims 1, 7, 14 and 18, appellant has argued that Smith fails to disclose at least one first cylindrical resin layer and at least one second cylindrical resin layer, wherein the at least one second cylindrical layer is in direct contact with and serves as a supporting layer for the at least one first cylindrical resin layer. However, Smith discloses that cover layer 14 is in direct contact with layer 12 (Fig. 5) and that layer 18 and layer 12 are in direct contact (Fig. 6). Appellant argues that Smith discloses that the layers are adjacent, however, Figures 5 and 6 clearly illustrate that the layers are in direct contact. Appellant argues that there is a tie layer between hose 10 and cover layer 14. However, Smith clearly discloses that such a tie layer is optional (column 4, lines 14-26).

Appellant argues that Smith fails to disclose wherein the at least one second cylindrical resin layer comprises a block copolymer which comprises at least one segment selected from the group consisting of PBT and PBN as a hard segment and at least one segment selected from the group consisting of polytetramethyl glycol and polycaprolactone as a soft segment. However, Ito '312 discloses wherein the second layer (the middle layer) comprises block copolymer which comprises at least one segment selected from the group consisting of polybutylene terephthalate and polybutylene naphthalate as a hard segment, and at least one segment selected from the group consisting of polytetramethylene glycol and polycaprolactone as a soft segment (column 5, line 62 through column 6, line 32 and column 6, lines 57 through column 7, line 5). Appellant has argued that one of ordinary skill would not be motivated to replace the cover layer of Smith with an intermediate layer of Ito.

However, Smith also discloses that inner layer 18 is made from PBN and directly attached to layer 12 (Fig. 6, column 3, lines 58-67). One of ordinary skill would have been motivated to use the layer of Ito in Smith in order to provide improved resistances such as gasoline, detergent and hydrolysis.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Appellant has argued unexpected results but has not specifically detailed in the instant brief what the unexpected results are. Furthermore, appellant has not provided any comparison between the instant invention and those of Smith or Ito, nor explained how the unexpected results are not expected upon the combination of Smith and Ito.

With regard to all the dependent claims, appellant has repeated the above arguments and as such, the above responses are repeated for the dependent claims.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

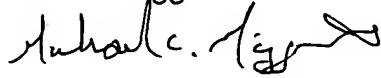
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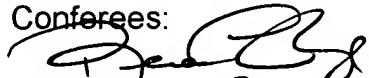
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Michael C. Miggins



Conferees:



Rena Dye SE, AS 1794



Romulo Delmendo

